

MCF 3M

Review Day 3

- Complete the Square
- Quadratics Word Problems

Jun 7-8:41 AM

p 255 q9

$$C(t) = \$1$$

$$t = \text{# of cars}$$

$$C(t) = 0.2t^2 - 10t + 650$$

Minimize cost $\rightarrow \therefore$ vertex \rightarrow Complete the Square

$$C(t) = 0.2(t^2 - 50t) + 650$$

$$C(t) = 0.2 \left[t^2 - 50t + 625 - 625 \right] + 650$$

$$C(t) = 0.2 \left[(t - 25)^2 - 625 \right] + 650$$

$$C(t) = 0.2(t - 25)^2 - 125 + 650$$

$$C(t) = 0.2(t - 25)^2 + 525$$

$$(25, 525)$$

They will minimize cost if they make 25 cars per day at \$525.

$$\frac{525}{25} \rightarrow \$21 \text{ per car}$$

Jun 7-8:48 AM

p256 q 7&8

$$h(t) = m$$

$$t = \text{sec}$$

$$h(t) = -4.9t^2 + 19.6t + 0.5$$

$$h(t) = -4.9(t^2 - 4t) + 0.5$$

$$h(t) = -4.9 \left[t^2 - 4t + 4 - 4 \right] + 0.5$$

$$h(t) = -4.9(t - 2)^2 - 4 + 0.5$$

$$h(t) = -4.9(t - 2)^2 + 19.6 + 0.5$$

$$h(t) = -4.9(t - 2)^2 + 20.1$$

$$(2, 20.1)$$

At 2 sec the ball reaches a maximum height of 20.1m.

$$h(t) = -4.9t^2 + 19.6t + 0.5$$

$$h(t) = -4.9(1)^2 + 19.6(1) + 0.5$$

$$h(t) = -4.9 + 19.6 + 0.5$$

$$h(t) = 15.2$$

The ball is at 15.2m at 1 sec.

Jun 7-9:07 AM

Complete the square

$$\checkmark \leftarrow S$$

$$a(x-h)^2 + k = f(x) \quad a)x^2 + b)x + c = 0$$

$$y = -3(x - 6)^2 + 4$$

$$y = -3(x - 6)(x - 6) + 4$$

$$y = -3 \left[x^2 - 6x - 6x + 36 \right] + 4$$

$$y = -3(x^2 - 12x + 36) + 4$$

$$y = -3x^2 + 36x - 108 + 4$$

$$y = -3x^2 + 36x - 104$$

work

Jan 20-1:33 PM

Please Complete;

p. 182 q. 2, 3 odds, 6 & 7

p. 184 q. 1-6

p. 254 q. 2,3,4,6,7 & 9

p. 240 q. 7,8,11, & 12

Jan 13-6:26 PM

Jan 20-1:45 PM